REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on June 25, 2003, and the references cited therewith.

The claims are not amended, and claims 1-33 remain pending in the present application.

Information Disclosure Statement

Applicant respectfully requests that a copy of the 1449 Form, listing all references that were submitted with the Information Disclosure Statement filed on May 27, 2003, marked as being considered and initialed by the Examiner, be returned with the next official communication.

§112 Rejection of the Claims

Claims 1-33 were rejected under 35 USC § 112, first paragraph, for reasons set forth in the objection to the specification.

The specification was objected to under 35 U.S.C.112, first paragraph, as failing to adequately teach how to make/or use the invention. Applicant respectfully points out that Figure 1 and 3 specifically, and the accompanying text descriptions, teach explicitly how data may be routed through intermediate nodes or switches (*see, e.g.,* 309 of Figure 3) as it travels from the originating node to the destination node, without returning to the originating node.

Several examples of such are given in the specification, such as on p. 7, ln. 12-20, which describes how data may be routed through an intermediate link to a destination node through other than the originating node.

Consider, as a further example, FTE node 4 as an originating node, and FTE node 3 as a destination node. Following the method taught in the specificaiton and illustrated in the flowchart of Figure 3, a message is received in the first fault-tolerant node switch 2 (103), and is forwarded to FTE node 3 via either the first link direct connection to FTE node 3 or via the second link through Switch 1 (102) and then to an alternate connection to FTE node 3. Neither of these links are directly to the originating node, but are to other intermediate nodes or to the desination node.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE
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§102 Rejection of the Claims

Claims 1, 2, 4, 12, 13, 15, 23, 24 and 26 were rejected under 35 USC § 102(e) as being anticipated by Bruck et al. (U.S. Patent No. 6,088,330).

Bruck describes a computing node array having two network switches (110 and 112). Each of the nodes is connected to both of the switches, which are the only elements taught to perform any switching or the routing of data between nodes or to perform other such network functions.

In the present invention, the fault-tolerant nodes themselves are taught to determine the state of links to other network nodes, and to perform link selection for routing data to other nodes. Claim 1, for example, specifically recites "determining in each fault tolerant node the state of a first link... ; determining in each fault tolerant node the state of a second link...", which is not taught by Bruck.

Because the pending claims recite the function of determining the state of links to other nodes and selection of links, which is not present in Bruck, these claims are believed to be in condition for allowance. Reexamination and allowance is therefore respectfully requested.

Claims 3, 14 and 25 were also rejected under 35 USC § 102(e) as being anticipated by Bruck et al.

To sustain a rejection under 35 U.S.C. §102(e), the cited reference must show in a single prior art reference each element of the claim or claims under consideration. *In re Dillon* 919 F.2d 688, 16 USPQ2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991). Previous Office Actions (*see,e.g,* Paper 8), as well as the present Office Action (*see,* p. 4, ln. 1-2), admit not all elements of the pending claims are present in Bruck. Specifically, the Office action admits that the non fault-tolerant node recited in claims 3, 14, and 25 is not present in Bruck. Further, these claims depend from claims believed to be allowable as described in greater detail above, and so are believed to be in condition for allowance as dependent on allowable base claims.

Reexamination and allowance of these claims is respectfully requested.

§103 Rejection of the Claims

Claims 5-11, 16-22 and 27-33 were rejected under 35 USC § 103(a) as being unpatentable over Bruck et al., as applied to claims 1, 11 and 23 above, in view of Okanoue et al. (U.S. Patent No. 5,925,137).

These claims are dependent on base claims believed to be in condition for allowance, as explained above in greater detail, and so are believed to be in condition for allowance as dependent on allowable base claims.

Further, to sustain a rejection under 35 U.S.C. §103(a), the cited references must teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)). The Okanoue reference discusses only a ring network of devices having network connections lacking a routing protocol, and wherein nodes poll their ring neighbors for link status and maintain the results for links to neighbors only in a table . A message is then redirected around the ring if it reaches a fault in the ring network.

In contrast, the present invention teaches fault-tolerant nodes having specific structure and function, such that each maintains a status table indicating its communication capability with the other nodes in the network, and in which at least one of the intermediate nodes has at least a first link, a second link, and a link to an originating node, as is described in the pending claims.

Because the claims as amended are different in structure and function than are the systems in the cited references, the claims are believed to be in condition for allowance. Reexamination and allowance of the pending claims is therefore respectfully requested.

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9581 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

JIANDONG HUANG ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 349-9581

Date _____ Aug 25 03 _____   By _____
                John M. Dahl
                Reg. No. 44,639

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner of Patents, P.O.Box 1450, Alexandria, VA 22313-1450, on this 25 day of August, 2003

Gina M. Uphus   _____
_____

Name   Signature